Claims

1. A method of in vitro screening for a test substance (ligand) involving selecting and detecting by means of at least two assay systems comprising the following steps:

(i) in a first cellular or tissue assay system selecting the ligand have transcriptional activity

which is mediated by activation of ER and

which is measured by detecting potency in the cellular or tissue assay system comprising ER and an ER-driven reporter gene,

whereby, in the first assay system the ligand activates the potency with an $EC_{50(ER)}$ (half-maximally effective ligand concentration) lower than or equal to 10 nmol/l, and

detecting the activation of the transcription;

and

(ii) in a second cell-free or enzymatic assay system, selecting the physical-chemical interaction (recruitment) of SRC-1, and fragments thereof, and the ER

which is measured by detecting the potency of this interaction in the cell-free or enzymatic system

wherein the ligand activates the ER and induces interaction with the co - present SRC-1 and fragments thereof, in the second assay system with a $EC_{50(ER+SRC)}$ higher than or equal to 100 nmol/l, and

detecting the potency of the physical - chemical interaction of SRC-1, and fragments thereof, and of ER.

2. A method of in vitro screening for a test substance (ligand),

which is a known estrogen or a ligand with estrogenic activity,

in a cell-free or enzymatic assay system by selecting the physical-chemical interaction (recruitment) of SRC-1, and fragments thereof, and of the ER

which is measured by detecting the potency of this interaction in the cell-free or enzymatic system

wherein the ligand activates the ER and induces interaction with the co - present SRC-1 and fragments thereof, in the second assay system with a $EC_{50(ER+SRC)}$ higher than or equal to 100 nmol/l, and detecting the potency of the physical - chemical interaction of SRC-1, and fragments thereof, and of ER.

3. A method of an in vitro screening for a test substance (ligand) according to claim 2
which ligand is an estrogen and transcriptionally activates a cellular assay system comprising ER and an ER-driven reporter gene,
wherein the ligand activates the potency with an $EC_{50(ER)}$ (half-maximally effective ligand concentration) lower than or equal to 10 nmol/l.